

Dec, 2019

Total No. of printed pages = 6

PY 132709(E3)

**BINA CHOWDHURY CENTRAL LIBRARY
(GIMT & GIPS)
Azara, Hatkhowapara,
Guwahati -781017**

Roll No. of candidate

--	--	--	--	--	--	--	--	--	--

2019

B.Pharm. 7th Semester End-Term Examination

ESE

**HERBAL DRUG TECHNOLOGY AND
PHARMACOLOGICAL SCREENING — Elective**

(Old Regulation)

Full Marks – 100

Time – Three hours

The figures in the margin indicate full marks
for the questions.

Answer Question No. 1 and any six from the rest.

1. Choose the correct answer from the followings:
(10 × 1 = 10)
- (i) “Knockout mice” used in pharmacological screening are
- (a) Genetically modified bread
 - (b) Devoid of some gene
 - (c) Mutated natural species
 - (d) None of these
- (ii) UP and down stair dosing is associated with
- (a) OECD 420 guide line
 - (b) OECD 425 guide line
 - (c) OECD 423 guide line
 - (d) All of these

[Turn over

(iii) What do you know about the *sillico* model in pharmacological study?

(a) In vivo animal study

(b) Invitro study

(c) CADD

(d) Enzyme inhibition

(iv) Animal toxicology study comes under the schedule

(a) Schedule P

(b) Schedule Y

(c) Schedule W

(d) Schedule M

(v) CPCSEA is formed in the year

(a) 1964

(b) 1960

(c) 1970

(d) 1974

(vi) Dose of Morphine sulphate in analgesic activity

(a) 1ml/100mg bw

(b) 1ml/100g bw

(c) 3ml/100mg bw

(d) None of above

BINA CHOWDHURY CENTRAL LIBRARY
(GIMT & GIPS)
Azara, Hatkhowapara,
Guwahati -781017

(vii) Which of the following is not an advantage of super critical fluid

(a) Non sterile

(b) Bactericidal

(c) Non explosive and non combustible

(d) Both (a) and (b)

(viii) In super critical fluid extraction, the temperature maintained is

(a) 30°C

(b) 31.06°C

(c) 31.60°C

(d) 30.06°C

(ix) Which of the following properties are characteristics of tannin

P They give precipitate with alkloids

Q They give a yellow or blueish-red colour with iron(III) chloride

R They transform hide into leather

S They give a pale pink precipitate with iodine

(a) P,Q,S

(b) P and Q

(c) P and R

(d) Q

(x) Chloroform is useful solvent for the extraction of following which phytoconstituents

(a) Gum

(b) Protein

(c) Volatiie oil

(d) None of the above

2. (a) Write in brief about the alternative method of animal experiment used in pharmacological study and research. What is 3R strategies for alternatives to animal experiments

(b) Describe briefly about OECD guidelines (420,423 and 425).

(c) Differentiate between acute, sub-acute anti chronic toxicity study. (6+5+4)

3. Explain in detail about the pharmacological screening of the following (3 × 5)
- (a) Anti-epileptic drugs
 - (b) Antidepressant drugs
 - (c) Antidiabetic drugs.
4. Write short note on the following topic (3 × 5)
- (a) Bioassay of digitalis
 - (b) Bioassay of d-tubocurarine
 - (c) Bio assay of oxytocin
5. Differentiate between *invitro* and *invivo* method. Why special test of toxicity study done? What are different sign of writhing pain? Describe any two models for pharmacological screening of analgesic drugs obtained from plant origin. (3+2+1+9)
6. Write the full form of IAEC and CPCSEA. What are the use of pynotion and glibenclamide? How does locomotor activity measure? Define therapeutic index. Write down the importance of bioassay. Give the full form of LAL and MAT test. (2+2+3+2+4+2)
7. Define the terms sublimation and fractional distillation. Write in Details about the possible ways of Adulteration of Herbal Crude drugs. How do you estimate quantitatively Alkaloid, Carbohydrate, flavonoids in a given extract? (4+5+6)

8. What do you mean by shelf life of a formulation? Discuss in detail the standardization of herbal preparation. (2+13)

 9. Explain in detail about the methodology of supercritical fluid extraction. Discuss instrumentation and application of "High Performance Liquid Chromatography" technique. Discuss the principal involved in the production of herbal formulation. (3+7+5)
-